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MICHAEL EVENSON NATURAL RESOURCES

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10 November 1998

Bruce Halstead, US Fish & Wildlife Service
1125 16th Street, Room 209
Arcata, CA 95521
fax (707) 822-8411

Re: Permit numbers PRT-828950 and 1157.

John Munn
California Department of Forestry
1416 Ninth Street
Sacramento, CA 95814
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Re: SYP 96-002

Dear Mssrs. Halstead and Munn,

This letter is on behalf of the Mattole Salmon Group, the Mattole Restoration Council, the Lost Coast League, and myself, a rancher who lost bottomland acreage recently to the sediment-laden Mattole. That is, I am personally affected by this HCP and SYP. It is my pleasure and duty to acquaint you with my view of this plan since I have on the ground experience that you and your agencies lack. In fact, it is quite appalling how little time in the field you have had considering how important this HCP is going to be for those of us who live and work downstream of the ownership. Knowledge of land management practices is incomplete if you do not actually spend time seeing the impacts of past management and evaluating over time how those impacts work their way through the watershed systems. I dare say that no reviewers traveled to the mouths of all the streams likely to be affected by this plan. Thus, we, the more experienced public, are already suspicious that you will approve this HCP based upon inadequate review of information readily available to you (1) by actual observation and (2) by learning from those of us who have been observing for many many years.

ME - 1

In this letter I have refrained from lengthy discussions of a scientific nature since I believe others with more credentials and qualifications have entered those perspectives into the record. In addition, the Mattole Documents were entered into the public record some time ago and must be considered thoroughly at this point. They were sent and acknowledged as valuable aids in evaluating this HCP by representatives of the USFWS and CA Secretary of Resources. Please find and use these documents in your evaluation of the HCP in regard to the Mattole holdings. Also note that I have used underlining to draw your attention to some, but not all, issues. There are many thoughts which I did not underline; you are going to have to read the whole thing to understand all of my concerns.

I have attached a copy of my previous letter on this HCP that addressed the scoping of issues. The issues raised in that letter were not adequately responded to by the HCP and, therefore, I am placing them under you nose yet again in hopes that you see the need for incorporating them into a final document that merits approval. As it now stands, the HCP is so inadequate to protect public trust resources as to be rejected out of hand. My understanding is that you are not going to do that because of over-riding political considerations – a very poor excuse. Take a second breath and do the job we pay you for.

One cannot contemplate this HCP process without feeling a great weight of sadness and tragedy. The entire Headwaters Deal is laden with the ugliness of greed and presumption of power. And here, at the tail end of the process, we find the guardians of the fish and wildlife seated at the table to evaluate the sufficiency of a document produced by a company that is wielding spectacular influence over cabinet officials and senators. What are we, the public, to make of this reversal of roles: that the federal agencies mandated to preserve the natural biological diversity and richness of the nation's heritage are requested to give their opinion on the likely hazards of approving the harvest plan submitted by one of the country's (and certainly the state's) most egregious violators of environmental law; and it is well known beforehand that the plan shall be approved pretty much the way it was drafted.

You are all aware of the process your agencies went through working with this company. You are all aware that the company negotiated as in a business deal what was, by law, a matter of the survival of species important to the region, the nation and the world. You must remember how often you shook your heads at the preposterous application of science presented by the company and, yet, your superiors in Washington signed their names to each stage of the progress of this plan. So that now it lies before the nation as a product of your cooperation with the company and the public is telling you, in no uncertain terms, that the plan is woefully inadequate. No doubt one could berate you for your assent to this HCP. For we, the downstream residents, contract loggers, and local fisherfolk, see in this plan the destruction of most everything that Humboldt County means to us: healthy forests, streams teeming with salmon not sediment, feverish work in the summer and more relaxed fishing and hunting in the

winter. It is not presumptuous to assert that these core values are at risk if this HCP goes forward as proposed.

On what basis do I make that prediction?

Take the scramble over the Sulphur Creek (Mattole River) harvest plans. They were among the first to implement the Pre-Permit Application Agreement in Principle (PPAAP). This was concerning NMFS and the coho salmon primarily and the likelihood of hillslope failure to affect coho populations downstream. NMFS made its concerns known to the company and CDF in clear, strong language. The company and CDF ignored these concerns, the plans were approved, and loggers were sent out to clearcut the old growth forests. It was only stopped by the efforts of local residents who faced arrests at the gate to the woods and the legal action in federal court. As it now sits, the plans are enjoined in federal court and the challenge to the plans in state court is proceeding. It would appear that the process outlined in the PPAAP is not workable. ME-2

The Pre-Permit Application Agreement in Principle was followed by an Interim Aquatic Strategy (IAS) that has become incorporated as part of the HCP. Among the failings of the Interim Aquatic Strategy is the mass wasting avoidance strategy and its impact on the coho salmon. The IAS requires that the company obtain a report by a Certified Engineering Geologist if they contemplate harvesting in areas known to be prone to landslides, debris flows and debris torrents. To satisfy the concerns of the federal agencies, the Geologist need only file a report that, in his/her opinion, the activities will not increase the likelihood of hillslope failure. Nothing more is required. Then the agencies will have to evaluate whether to accept this opinion as valid. However, the agencies' concerns must be forthcoming within a short time span and they do not have an array of geologic expertise on staff that can respond in that time frame. Recent attempts to include geomorphologists to NMFS staff have not succeeded even though Redwood Science Laboratory (USDA/USFS). ME-3

In Sulphur Creek, Redwood Science geomorphologist Dr. Leslie Reid conducted a thorough analysis of hillslope processes and, using formulae obtained by visiting USGS Geologist Raymund Wilson, determined that the proposed clearcuts would increase the likelihood of hillslope failure by <u>at least</u> ten times. In addition, she found that the Certified Engineering Geologist had improperly evaluated past effects of logging, had not done on-site surveys but relied on aerial photographs in areas where the grass cover following a clearcut obscured land slumps, and made other serious errors of judgment and calculation. Neither the company nor CDF acknowledged her report. NMFS contracted for it and in its last communication re-affirmed its position that the harvest plans should not proceed. Their non-concurrence was joined by the California Department of Fish and Game, the US Environmental Protection Agency, and the North Coast Regional Water Quality Control Board. But they all were ignored.

If these responsible agencies can be ignored when there is overwhelming evidence supporting their position, then it is clear that the process is flawed and the wildlife habitat the plan is supposed to conserve is in jeopardy.

ME-3 CON

A Certified Engineering Geologist is not necessarily an expert in watershed processes. There is no guarantee that the license of this professional is at stake when an opinion is offered. If a slope should fail, coho redds and rearing habitat buried, downstream landowners put at risk and loss, the Certified Engineering Geologist is not held accountable. Nor, for that matter, is the landowner. Accountability must be included in this HCP. Otherwise, it will be an "I'm sorry" and a shrug of the shoulders for compensation. Again, woefully inadequate.

In Sulphur Creek, the Certified Engineering Geologist commented that there would be no "significant" increase in sediment coming off the harvest plans. However, as DFG pointed out in their analysis, what may not be "significant" to a geologist may be very "significant" to a biologist or to the creatures impacted. The Geologist did not take into account that the watershed was already impaired and that the law requires that no new impacts occur that would further impair the water quality of the stream. The Geologist only looked at the "big ticket items," the inner gorge slides, and calculated that the minor landslides he might envision from the clearcuts would not rival them in sediment production. In that way, if a stream were impaired and was producing ten times the natural background level of sediment , the Geologist may not find an individual landslide to be all that "significant." The cumulative impact, however, could be to extirpate species.

It is clear from the above that the Mass Wasting Avoidance Strategy is inadequate to accomplish its purpose. It is also evident that the HCP, as drafted, does not consider cumulative effects of past projects and does not consider cumulative effects of proposed projects in any scientifically credible light. And, furthermore, the above example demonstrates the CDF's inability to act as the lead agency in approving individual harvest plans.

The purpose of the Endangered Species Act is to bring those species back from the brink of extinction. They would not be listed if they were not on the threshold of existence. The ESA, then, has the duty to provide a plan for the recovery of listed species through habitat improvements and increasing populations. This HCP is more likely to cause widespread harm throughout the Northern California/Southern Oregon ESU of the coho salmon.

The company operates in Elk River, Freshwater Creek, Salmon Creek -- all important coho streams of the Humboldt Bay region. Their plans for eliminating the old growth refugia in the North Forks of the Mattole are likely to have a serious impact on the Mattole coho populations. They also plan to continue harvesting in the Eel's Bear Creek, Jordan Creek, and Stitz Creek, all former robust coho streams now reduced to bare survival levels. Within this ESU, the most important coho stocks are the in

Humboldt Bay streams, the Mattole, and Mill Creek (Smith River). This company has the potential to cause irreversible harm to the coho throughout the ESU and to cause jeopardy of the specie.

How can NMFS allow these coho streams to be lost and not make a Jeopardy Call?

ME-4

The type of evaluation that went into the Sulphur Creek plans constituted much of what would go into a Watershed Analysis (WA) of Sulphur Creek and the East Branch of the Lower North Fork of the Mattole. Yet, the very first WA under way is an example of bad science and bad faith. The Watershed Analysis for Freshwater Creek offers an example of a process determined to reach no conclusion other than support for the most rapid and complete clearcutting of all merchantable timber. And this in a watershed that has had half its timber clearcut in the past decade with plans in the HCP to finish off the rest in the next. This untenable conclusion is well known to watershed residents who have little doubt as to the impacts of past clearcutting. Is this how the company plans to move through their ownership? Draft a plan with inadequate protections and then remove even those measures by their faulty Watershed Analysis process?

Unless the effort put into completing Watershed Analysis is sincere, there is the likelihood that whatever protections contained in the default and interim guidelines may be thrown over for less stringent measures. Thus, even if one had faith in the wisdom of the application of science that appears in this HCP, there is no surety that the WA process won't substitute bad judgment for good, or worse judgment for bad. There is no guarantee in this plan that it will be improved by site specific analysis. Our experience has shown that it will not. It must be improved to include peer review by credible, third-party scientists with expertise in fields related to habitat and hillslope processes. And Watershed Analysis should only be used to increase protections of listed species under the ESA.

ME-5

In order for the company to increase its harvest in this first decade or so, there will be a need to expand roads into unroaded areas and to increase road densities in already roaded areas. Despite the road armoring component, the sheer numbers of miles of roads will pose an unacceptable risk to the watersheds. There should be a requirement that over the life of the HCP there will be a net reduction of roads over the ownership. In order to accomplish this, there must be a road abandonment program so that for every new mile of road built, a mile of old road should be obliterated. This will also have the effect of increasing the productive timberland base.

ME-6

The company's lack of respect for the law has resulted in over 270 violations of the CA Forest Practice Rules and, in addition, countless, and often un-cited violations of the Endangered Species Act, the Clean Water Act, and Porter-Cologne Water Quality Act. This pattern of lawless behavior should make them ineligible to obtain an Incidental Take Permit on any species. However, it is likely that political considerations

will continue to guide this permitting process and should such permits be issued there needs to be clearly defined monitoring procedures to protect the public resources. ME-6 CON.

In order for impacts from past harvests to be remediated, it will be necessary to know what the level of sediment production is and then a detailed plan will need to be implemented and evaluated for effectiveness. This must be completed prior to allowing further impacts to the streamcourses. A conservative approach is necessary until there are enough real examples of the diverse types of situations likely to occur. This will involve a monitoring procedure to ensure that target expectations are achieved and a cessation of future activities if expectations are not met. ME-7

At present, the company divides sediment mitigations into feasible and not feasible categories, wherein the feasible means relatively low cost. The company does not want to deal with sediment generated from past activities if the cost exceeds some internally determined figure. The larger sediment sources are not addressed and only the minor ones receive attention. This is indefensible from the standpoint of habitat conservation and ameliorating impacts to habitat from past harmful activities.

The company takes this stand because (1) they do not admit that past activities have affected habitat or created negative or cumulatively negative impacts on wildlife and (2) they do not want to underwrite the cost of fixing problems they created because it would lower their profits. This leaves the restoration costs to be borne by downstream property owners and the public.

It is essential that there be a plan for Compliance Monitoring to determine if the company has followed the requirements of the Permit and there must be Effectiveness Monitoring to determine if the company's activities are impacting listed species or if habitat modification is occurring which was to be prevented by adoption of the mitigation measures. Without these monitoring activities, the HCP is unacceptable. It becomes a blank check for the destruction of habitat. Even during the permit application period this company has pushed beyond the limits of lawful behavior. What is to stop them from continuing this after the Permit is obtained? Is a jeopardy call the only way to modify or halt their destructive practices? ME-8

All monitoring must be done with public involvement and by a team of dis-interested scientists. The team should be composed of qualified individuals from the Redwood Sciences Lab (USDA/USFS), Humboldt State University, and other respected workers including those in the disciplines of wildlife ecology, geomorphology, and watershed processes. This monitoring should be funded by the company since they are the party requesting the permit to take endangered species. Their findings should be peer reviewed as this panel will have impact on forest practices throughout the region.

In addition, because of the numerous violations this company commits, the HCP terms must be prescriptive rather than performance-based. The Permit must spell out in no uncertain terms what can and cannot be done on the ground and when activities ME-9

must cease. If the terms are unambiguous, then it will be easier for agency and company personnel to comply with the provisions and neither side will need to spend inordinate amounts of time in meetings over whether or not the Permit terms were met. Thus, it would be inadequate to allow for harvesting as long as certain habitat conditions are maintained if the definition of those conditions were to vary from site to site. Also, the measurements might reveal different conclusions depending where exactly they are made. We all know the inadequacies of sediment monitoring techniques and the state of the art is being refined each winter.

ME-9 con.

It would be preferable to begin with prescriptions that do not permit harvesting in zones likely to cause hillslope failure, such as in class III drainages on slopes exceeding 50%, or on active and inactive landslides or debris flows. By beginning with conservative guidelines, one can observe the conditions and how forest management activities affect critical areas. It is far easier to loosen regulations based upon actual observations over the decades, than by allowing habitat destruction to commence and try to determine what exactly caused the problems and what must be done to remediate the situation. Often it is too late; and, also, the company has defined "feasible mitigation" to mean those which they are willing to afford while they extract enormous wealth from the forests. The definition of feasible must be changed to mean that which can be completed independent of the costs involved. Again, we are considering granting a permit which is worth thousands of millions of dollars to the permittee. There are always costs associated with such enterprises.

In the Headwaters Agreement the company is allowed to purchase additional lands and have them covered under this Permit. And the company is rapidly purchasing much of the industrial timberland in the county because they anticipate they will be allowed to clearcut everything but what lies in riparian buffer zones. The present owners are not able to clearcut because they are constrained by either longterm management goals or environmental law. By obtaining a Permit, the company will be circumventing these laws and commit the lands to shortterm management goals (despite specious claims to the opposite). Thus, in issuing a Permit, the federal agencies are really deciding the fate of this county's wildlife and waterquality.

ME-10

Within the HCP document there is reference to aquatic conditions existing on Barnum Timber lands. We have information that these lands may be transferred into company ownership along with Eel River Sawmills lands. If this becomes consummated, the impact of the planned harvests in the HCP to the Mattole and Eel Rivers has been understated. Both Barnum and Eel River own large blocks of old growth which provide refugia for old growth dependent species and water quality for downstream beneficial uses. Agency personnel should evaluate this HCP in light of these potentially significant acquisitions and their planned demise.

The areas set aside for refugia under this HCP are not adequate. There is reliance on the ability of the harvested lands to recover, something that has not been borne out in practice. The clearcuts in the Mattole have yet to reforest after a decade.

ME-11

And the company's definition of late seral forest is a construct that bears no resemblance to late seral in a natural setting. If additional lands are included in this Permit, the need for more refugia and late seral and mature seral forests increases greatly since the Permit would then cover a much larger area, impacts to this area will be magnified, and opportunities to recruit new refugia areas will be greatly diminished. ME-11 con.

Should habitat conditions deteriorate, as anticipated by the scientific community's reading of the HCP, how will threshold levels be established? And what will trigger new measures? And what will those new measures be? The HCP does not address these issues because the HCP is written as if nothing could go wrong: "There shall be no adverse cumulative effects from this HCP." That, of course, is entirely unproven and very weakly substantiated (if substantiated at all). The federal agencies are acting irresponsibly if they allow the HCP to pass as drafted without clearly defined thresholds of population levels of species, habitat conditions, water quality conditions, et cetera and without clearly defined triggering mechanisms if those thresholds are crossed. ME-12

The California State Legislature, in approving its share of the Headwaters funding, included a provision for the purchase of unentered old growth forests in the Mattole River watershed. These are lands essential to maintaining water quality and minimizing downstream impacts to residents. The State expressed interest in acquiring these large (over 3000 acres) tracts of old growth – in area only rivaled by the Headwaters Forest complex. However, this alternative does not appear evaluated in the HCP as a feasible alternative to clearcutting. This omission must be corrected. ME-13

Please take the time to consider thoroughly the issues and concerns raised here. This is your opportunity to do your duty. You may not get a chance to perform such a great public service again in your career. And, unfortunately, if you do not discharge your duty to the best of your ability, you will regret it for the rest of your life. Our times are rife with political corruption in the form of campaign costs, contributions by wealthy and influential individuals and corporations, and decisions that are made based upon such "friendly persuasion." Strike a blow for honesty and inform those in Washington that this nation has to wake out of its sleepy-eyed ways. Be a part of the twenty-first century and live long enough and well enough to be able to tell your grandchildren how you did your part to preserve the rule of law and our natural heritage.

It is easier to do things right the first time.

Very Truly Yours,

Michael Evenson

MATTOLE RESTORATION COUNCIL
Post Office Box 160 • Petrolia California 95558 • (707) 629-3514

17 February 1997

Mr. Bruce Halstead
United States Fish and Wildlife Service
1125 16th Street, Room 209
Arcata, California 95521-5582

Dear Mr. Halstead,

This letter is written on behalf of the Mattole Restoration Council, the Mattole Salmon Group, the Pacific Coast Federation of Fishermen's Associations and myself, a landholder whose ranch, just 2 miles downstream from the confluence of the Lower North Fork and the Mattole River which swept away approximately 5 acres of older riparian alder forest in January of this year. We would like you to consider these comments regarding issues that need addressing in the Habitat Conservation Plan (HCP) for The Pacific Lumber Company. We view with a good deal of chagrin that the entire holdings of the Company have been broken into only 5 Watershed Assessment Areas. We would prefer that the Mattole be considered as distinct and there are many reasons for that request (they appear throughout this comment letter). With this in mind, we write principally about the HCP needs for the Mattole watershed that the Company plans to continue to adversely impact and hope and even expect that you will deal separately with the Mattole in your establishing of issues for Environmental Impact review.

Community concern for the health of the entire watershed runs high here on the Mattole. Since the late 1970s citizen groups have dedicated countless person-years and millions of dollars of private and public funds in the effort to restore native salmon stocks and essential watershed processes. Our knowledge is based upon watershed-wide personal observations coupled with and informed by that of our many highly-credited scientific consultants. Much of our studies and data have already been made available to your agency, the National Marine Fisheries Service, or to consultants for the Pacific Lumber Company. If you have further requests, please do not hesitate to contact our office.

In general, our recommendations are based upon a concept as ancient as western civilization, the Husbandman's Creed: "To leave the land to the next generation in better condition than I received it from the last." While we recognize that nowhere in the legal structure is that Creed formalized, we feel that it represents the best guidance for the perpetuation of society and its quality of life.

At the very least, inherent in land tenancy is the imperative to manage lands in a manner that does not sacrifice the common interests of society for the sake of short-lived private gain. The law of the land recognizes the right of the public to clean air, clean water, and abundant wildlife. In the final analysis, this Habitat Conservation Plan must follow the law. Throughout this region of northern California, there is a well articulated recognition of public Rights in regard to environmental amenities which originate on both public and private lands.

In sum, if one were to follow a single path of common sense to establish criteria for elements of an HCP, it would be those that answer the question, "What do I, as a landowner, need to know about my land in order to avoid unintentioned damage to the soil, flora and fauna (both on my lands and those downstream) in the practice of managing the land?" We believe that the recommendations that follow are some answers to that question and we expect our public agencies to require this information before settling on a "no surprises" policy of timber harvesting over the next century.

THE SYP PLAN

The age of virtual forestry is here and it is a frightening prospect to behold. We have been carefully reading Pacific Lumber's SYP document and after questioning PL's principal author/coordinator Henry Alden, it has dawned upon us that the plan contains little accurate assessment of what is happening on the ground; no feedback loop with which the computer eye can tell the computer brain that some theoretical practices have real results that have not been given consideration in the virtual mind which is in control of future practices.

Pacific Lumber is fond of movie images, even naming a past harvest (THP 1-93-537) "Five Easy Pieces," the film about a rough neck who abandons his girl friend for an easier, less responsible life. Well, remember the movie, "2001?" Is Hal at work here?

We said "frightening" above with good reason. We know the Mattole watershed intimately as we pursue the purpose of restoring our historic salmon runs over these past three decades. PL plans to clearcut the remaining old growth (of all species of trees) in a few decades and attempts to maintain conifers in areas historically stabilized by hardwoods. But, in the past decade, the California Forest Practice Rules notwithstanding, the Company has performed clearcuts in isolated segments of the Upper and Lower North Forks and every single one has generated unthinkable quantities of sediment through massive soil disturbances and slides. Take a look at the Brushy Ridge clearcuts (THPs 1-85-476 and 1-87-230). Inspect the Long Ridge clearcut and "switchbacks." Drive the haul road on the south face of Rainbow Ridge all the way across Green Ridge and below Devil's Hole. You will observe soil movements not appearing possible in the Model's Disturbance Index and not incorporated into the Risk Factors assigned to the Bear/Mattole Watershed Assessment Area. All these harvests and roads have been under the careful scrutiny of CDF forester Ernie Rohl, whose reputation for clear thinking has made him a credible public servant. Still, as forester Rohl wrote in one PHI report, "Zero net discharge of sediment was not achieved (in the immediate past plan)" and he promised to do better calculating what sediment might come off the next harvest.

With the specter of a 100 plus year cutting plan cemented to the landscape, as if part of its biblical heritage, we recently flew over both North Forks to evaluate the past several clearcuts. The damage was astounding and when we showed photographs to the Honorable Diane Feinstein, she demanded, "Does John Campbell know about this? He had better see these." John Garamendi shook his head and said, "Jeez, when are they (PL, or perhaps more generically, the timber corporations) finally going to get it?"

Truth is known to us by experience. This computer Model is not comfortable with empirical evidence of a bad condition while it contemplates doing more of the same on a landscape-scale plan. Somehow, truthful field observations did not find their way into digitized parameters for the Model to evaluate as It developed the plan. So, we in the Mattole, who have dedicated decades of volunteer and poverty-line wages in an

attempt to reverse salmon habitat degradation, are trapped in a real watershed whose forest is about to be leveled by a virtual hand.

The Model thinks "clearcut," and evaluates the disturbance as if it were performed by a lazer beam. Clean as a whistle. The sediment generation is given a number, in this case derived from the "Disturbance Index," which is calculated from the formula:

Acreage Cut X Silviculture Factor X Yarding Factor = % of Acreage Disturbed

Simple, no? All clearcuts perform perfectly according to plan and equal "1," the highest value available for silviculture. All tractor yarding equal "1," the highest number made available for yarding. Gone, in a nanosecond, with a digital component, is the difference, for instance, between a Simpson clearcut and a PL clearcut. They are "virtually" identical. Yet walk about on one, or fly over one (for these lands are behind locked gates), and you see plenty of difference. It could be because the terrain is different. It could be because the logging contractor was different, or even because the cat skinner had a spat with his kid one morning before coming to work, or because one company paid the logging contractor $25 per Thousand more for their work. It could be because a series of storms hit the slopes with more fury and passed over the other. It could be any number of variables we have to contend with here on this seizmically active edge of the continent. The Model is blind to all factors but the ones its program writer wants it to know or knows how to quantify.

When you observe a healthy forest, how many factors *that you know by counting* go into making that forest healthy? When you observe a chopped down forest, how many factors relevant to the impact of the logging can you count and accurately weigh in order of importance? How often are you satisfied that you know, to a percentage point's accuracy, what went right and what went wrong on the landscape? How many field trips have you taken with true "experts in the field" where considerable differences of opinion were expressed and, by day's end, all concluded that they had "gotten a good deal" from the exchange of ideas.

No. Forestry has not reached the level of a pure science yet. It is at the stage of empirical science. Disturb the forest, observe the effects, ponder the causes and do things a little bit different the next time. This is the bottom line of forestry. Pacific Lumber's SYP, expecting no surprises, leaps into the future with all the answers to all the questions, while refusing to look down or come to grips with the results of its last decade of management.

This describes our dilemma. And in that "our" we are including every living thing in those forests as well as every living thing downstream as well as every person who encounters the Mattole:

- fishing here or offshore,
- recreating at the BLM administered Lost Coast,
- making a living off the bounty of the river through ranching, farming, or the tourist trade,
- stopping in one's tracks and proclaiming "How beautiful God's creation truly is;"

We speak for all these people, including all citizens of the United States by Right of the Law of the Land. There are negative impacts to what Pacific Lumber has done in the recent past in the Mattole. They are readily observable. However, they do not appear to constrain this Model which represents an averaging of all acknowledged (by the Company) impacts across its dissimilar 200,000 acres.

We have been given a few weeks to discern the problems in this SYP document (that was developed by handsomely rewarded staff and consultants over the span of 2.5 years) which will shortly become the framework for an HCP. And we are to inform our publicly delegated agencies (who will co-author with Pacific Lumber the HCP) what elements should be analyzed for the Environmental Impact Statement of the HCP.

Do you remember the movie, "TRON" from the early 1970s? Billed as the first cyber drama, it was the first computer graphic attempt at visualizing the cyber world. The plot revolved around a character who

was transformed into an electrical impulse inside a computer and followed the dangers he faced with a very short deadline to prevent the computer from wreaking destruction in the real world. The situation in regard to forestry by computer model is not far off from this situation.

The Pacific Lumber Company has done its best to bring its forestry division into the Information Age with a sophisticated computer program-driven plan. It may be the best one out there. We cannot say. But it falls far short of modeling real forests as one can know from actual observations of the Upper and Lower North Forks of the Mattole. The Company demanded an HCP with "no surprises" as part of the Headwaters Deal. We, the public, demand equal consideration for our public trust rights (clean air, clean water, abundant flora and fauna of all species). Down the road, as this plan is implemented, we demand (and our demand is supported by the force of Law) that there be "no surprises" of habitat degradation or lowering of water quality in a water body that is already impaired as to temperature and turbidity. It is this mandate which must determine the scope of analysis of the HCP and to which the following recommendations address.

And lastly, we encourage you to devise others as you see fit in order to guarantee "no surprises" for us.

RECOMMENDATIONS

Inventory existing sources of water pollution (turbidity, sediment production, excessive temperatures) from historic natural events and from the results of past management practices.

In this region, one of the most obvious indications of degradation is the movement of soil downslope and into the watercourse. More specifically, one must understand how the land has responded to road building and timber harvesting. The first step in that analysis is to inventory major slope failures and analyze their cause. Included in the analysis must be:

1. a rough measurement of the quantities of material moving downslope,
2. the duration of time since triggering,
3. a separate analysis for historic failures not due to management activities and the time period required for healing the failure,
4. a projection of when recent failures will achieve stability, a monitoring procedure which will track the success of the projection, and a mechanism for halting future activities which may trigger more events until previous problems have been abated.

Monitoring procedures and accountability must satisfy appropriate federal and state agencies signing off on this HCP as well as communities which live with the downstream effects of forest management activities.

Analyze the relative role of silviculture vs. road construction (and maintenance) in observable sediment production.

In order to implement the stop work provisions of #4 above, it will be necessary to understand what particular activity is causing the problems. An aerial analysis, such as completed by Pacific Watersheds Associates (Aerial Reconnaissance Evaluation of 1996 Storm Effects on Upland Mountainous Watersheds of Oregon and Southern Washington: Wildland response to the February 1996 storm and flood in the Oregon and Washington Cascades and Oregon Coast Range Mountains, 1996) would supply this information.

Quantify existing sediment deliveries from past harvests (separate from slope failures), both at present and over time, and project when each will cease delivering sediment. Develop a plan for abatement of these existing sources. Analyze how a 20% Disturbance Index level will protect water quality.

In order for impacts from past harvests to be remediated, it will be necessary to know what the level of sediment production is and then a detailed plan will need to be implemented and evaluated for effectiveness. This must be completed prior to allowing further impacts to the streamcourses. A conservative approach is necessary until there are enough real examples of the diverse types of situations likely to occur. This will involve a monitoring procedure to ensure that target expectations are achieved and a cessation of future activities if expectations are not met.

Analyze the adequacy of the 20% Disturbance Index limitation.

This determination condemns properly functioning watersheds to increasing levels of disturbance and negative impacts. At the same time, it might limit activity in severely degraded basins. Since it is averaged over the entire WAA, it most certainly will lead to overall degradation where existing DI is lower than 20% (especially in the Mattole). Pacific Lumber attorney, Jared Carter, has stated in a court of law that the Mattole is very sensitive to timber harvest disturbances, more so than other drainages. How does this recognition influence the establishment of the 20% DI limitation since the Mattole is sensitive and there is nowhere near that level of disturbance at present?

If one uses the 10 year recovery time frame at which point the acreage disturbed is assumed healed, what are the monitored indications that contribute to meeting that time frame (e.g., vegetative cover, presence of moss or lichen, soil compaction levels, verifiable absence of sediment leaving the site)? How will these be monitored to ensure compliance with the 10 year projection? Will community groups be involved? The Mattole Restoration Council has satisfactorily monitored a Lower North Fork timber harvest completed jointly by resident landowners and Sierra Pacific Industries.

Create a timetable for the abatement of present sediment production above background levels (calculated prior to 1950) before additional impacts may occur.

The SYP establishes a road armoring program which will go part of the way toward this goal. However, it does not adequately address the quantities of sediment generated from past practices, nor does it address restoring slopes and streamcourses denuded from debris flows.

Monitor the effect of road armoring in reducing sediment production.

Analyze the role of Mature Seral Forests in the maintenance of water quality and terrestrial habitat for old growth dependent species and analyze how those functions will be maintained in the Late-Seral forests described in the SYP. Identify refugia on the ownership and discuss how they will be protected from degradation.
The SYP charts the removal of Mature Seral Forest from the property and plans for the maintenance of a minimum of 10% Late Seral Forest in perpetuity. The following are definitions (*emphasis added*) in the FEMAT Report (1993):

"Late-Seral stage - The period in the life of a forest stand from first merchantability to culmination of mean annual increment. This is under a regime including commercial thinning, or to 100 years of age, depending on wildlife needs. During this period, stand diversity is *minimal*, except that conifer mortality rates will be fairly rapid. Hiding and thermal cover may be present. Forage is *minimal*.

Mature seral stage - The period in the life of a forest stand from culmination of mean annual increment to an old-growth stage or to 200 years. *This is a time of gradually increasing stand diversity.* Hiding cover, thermal cover, and some forage may be present.

Old-growth conifer stand - Older forests occurring on western hemlock, mixed conifer, or mixed evergreen sites that differ significantly from younger forests in structure, ecological function, and species composition. Old growth characteristics begin to appear in unmanaged forests at 175-250 years of age. These characteristics include (1) a patchy multilayered canopy with trees of several age classes, (2) the

presence of large living trees, (3) the presence of larger standing dead trees (snags) and down woody debris, and (4) *the presence of species and functional processes that are representative of the potential natural community*. Definitions are from the Forest Service's Pacific Northwest Experiment Station Note 447 and General Technical Report 285, and the 1986 interim definitions of the Old-Growth Definitions Task Group."

The concern here is that the SYP charts the removal of the entire Mature Seral stage of forest from the landscape. With that removal will be the extirpation of very specialized habitats which are not present in the Late Seral forests described in the SYP. There is no definition of old growth forest offered in the SYP except to state that it is a component of Late Seral forests. From the above, however, we recognize that there is a difference between the two.

Identify restoration of potential refugia and how, when and where that will be accomplished and monitored.

Identify specialized habitats which, when gone, may be irreplaceable.

As noted above, the elimination of an entire seral stage of forest is likely to have consequences not discussed in the SYP. Further analysis of managed late-seral forests containing the full complement of mature seral habitat features is needed before the theory that it is possible can be accepted. Monitoring of the Company's success in this effort is essential to allowing future activities based upon the adequacy of late seral forests to function as mature seral forests.

Evaluate how present water quality standards will be met when the old forests that maintain that level of quality are removed.

It is well documented that Mature seral forests provide the highest quality water for aquatic organisms and salmonids. In the Bear/Mattole, which has 3,599 acres of old growth forest, the water quality is already impaired. The SYP calls for the removal of 1,734 old growth acres in the first fifteen years and most of the remainder twenty years later. That will undoubtedly have adverse impacts upon water quality. The past decade's harvests have presented observable negative impacts to water quality. Analysis must be sufficient to determine what proposed harvest impacts will be prior to removal of the forest.

Impacts of future projects must be considered in an entire watershed context and not limited geographically to the sub-basin. Assess historic use throughout the watershed by resident and anadromous fish species.

Many species (especially anadromous fish, but also large mammals) are opportunistic and are known to use one drainage in a watershed when another suffers natural disturbance. Historically, all sub-basins have maintained habitat for anadromous and resident fisheries at one time or another. This plan must allow for the native species that now use other parts of the watershed to also use both North Forks as the need arises and when obstructions to fish passage occur. Data and information (including specie presence and numbers, habitat features by typing, stream temperatures, fish spawning and rearing capacity) from the whole Mattole watershed is essential to evaluating impacts generated in the North Forks to these species' habitat and chances for recovery. This data is missing in the SYP, a document which fails to recognize the well documented presence of coho and chinook salmon.

Fully address road networks, systems of maintenance, culvert analysis (adequacy, diversion of natural watercourses, fish passage) in a Transportation Plan.

The proposed road armoring program is a step in the right direction. However, there is no further survey required and no commitment to looking upslope for causes of road related problems. Survey, assessment, and remediation protocols must be evaluated with a guarantee that work needed will be done in a timely manner. There should be an additional requirement that all roads (even those impassable by vehicle) be

monitored by personnel with hand tools during the first several heavy rainfalls to prevent small blockages of drainage structures from developing into major problems and to divert water off roads onto armored or stable banks.

Harvest and road plans must be more specific before the HCP can take effect.

While the overall plan may satisfy the need for the theoretical basis for management, they cannot substitute for actual harvest or road plans which will have impacts that can be evaluated in a site specific manner.

Will winter operations be allowed? At present there is no indication in the SYP how activities will be altered due to the increase of impacts during saturated soil conditions.

Also needing specification for analysis is the yarding techniques proposed on particular slopes and soils, the timber type being removed, the acreage involved, and how the harvests will be staged throughout each sub-basin.

Analyze frequency of storm events of ascending magnitudes and reaction of watershed to management disturbances.

This analysis is necessary to understand impacts dependent upon the intensity of rainfall possible on the site and observations of past practices during storms of known intensity. It is clear that it is possible to have more than one "hundred year event" in one century. Our understanding of what is normal rainfall and the highest magnitude rainstorm to plan for is shifting upward.

Correlate rainfall data and gauging station flow data.

An ergonomic analysis of the North Forks' ability to discharge (channel configuration, stream reach gradients, impacts downstream on stream banks and neighbors) is an important component in understanding the force of precipitation upon bare soil and its likely impacts lower in the watershed.

Analyze the relative role in sediment production of management activities vs. naturally occurring events.

Where drainages are intact, there is the opportunity to establish baseline data of background sediment levels. Once the landscape is fragmented and disturbed, it will not be possible to assign values. Included in this should be an aerial photograph analysis of pre-1950s conditions. Selecting comparable drainages, such as those in nearby Humboldt Redwoods State Park, may not satisfy this requirement unless further characteristic elements of these drainages are delineated to determine their similarity to drainages where management activities are contemplated.

Analyze with more specificity Dr. Weaver's concept of watershed sensitivity (Appendix C of the SYP)

As he notes in this section, Dr. Weaver's concepts of sensitivity and practices need to be evaluated from observations, not just from a theoretical basis. He delineates a host of relevant factors in evaluating land use disturbances and their effects and discusses numerous possible scenarios relating to causes and agents of healing. The treatise is replete with the conditional verbs (can, may, is likely) because without site specific information, no conclusion can be drawn. He assumes natural recovery rates of 10 years, citing in one example, the root strength of the young forest that establishes after the disturbance. This does not describe the situation on Rainbow Ridge, for example, which has large areas still unvegetated after a fire and salvage clearcut. It would be helpful to have very specific examples of where and when his analytic protocols are on target and where they miss.

Dr. Weaver states (Appendix D, p.1) "Limitations in the state-of-the-art, as well as data limitations for most wildland watersheds, precludes development of a quantitative, process-based model to predict absolute watershed sensitivity. For this reason, field inspections and project level assessments will continue to play a critical part in evaluating a watershed's geomorphic sensitivity and predicting the effects of proposed land use activities." The above qualifying statement suggests that such field inspection and analysis must be completed prior to allowing harvests to continue with "no surprises."

Analyze presence/absence of bryophytes, fungi, and lichens in mature stands and in late seral stands; and analyze effect of silviculture planned on their abundance and ability to function.

The role of these plant forms in the interdependent web of a healthy functioning forest has been established. There is no recognition of their presence or absence in the SYP, nor is there any discussion of the effect of harvest plans on their populations or the populations of plants and animals which depend upon their presence.

Analyze Mattole River ownership separately from that of the Bear River.

These two watersheds, while neighboring and sharing some conditions, are very different. The Mattole runs South to North 60 miles in the rainshadow of the King Range. The Mattole is home to coho, chinook and steelhead while the Bear presently only has steelhead. The community concerns regarding impacts to dwellings and riparian vegetation downstream are widely shared in the Mattole which is home to many more residents. This is an example of the need that:

Watershed Assessment Areas must be divided by distinct watershed boundaries or by California State Planning Watershed boundaries.

Attempting to evaluate the information provided in the SYP in order to asses direct and cumulative effects is impossible. The data and techniques for guiding management offered are generalized to develop a plan for 200,000 acres. The five WAAs do not break that down into distinct watersheds. The effects of management in watershed "A" is not as likely to effect watershed "B" as much as it is the other sub-basins of "A." Yet the entire "A" is not evaluated and only a portion of "A" and "B" are.

Analyze more completely riparian zones.

The SYP gives a generalize discussion of the different types of riparian vegetation regardless in which watershed they are found. The Mattole holdings riparian zones, for example, differ from those in the upper Bear. The mix of forest types and prairie contain different riparian zones. These, in turn, vary according to slope, aspect, and geographical features. Riparian zone management is crucial to many species of special concern and an overly generalized analysis is inadequate to assure protection of these critical areas.

Analyze importance of active channel being so great a proportion of riparian acres in the Bear/Mattole WAA. Analyze relationship of active channel acreage to river miles in each Zone to assess natural sensitivity.

The SYP collects interesting data on the different proportions of seral classes, forest openings and active channel acreages in Table 15, Chapter 4. The analysis of that information needs to be taken further to develop the relative sensitivity of each watershed. Unfortunately, there are no watershed boundaries other than the WAA boundaries to study. But even still, one notices that the Bear/Mattole riparian zones contain a large portion of active channel and that the vegetation is not very old (by comparison with other WAAs). This is an indication of frequent disturbances which do not allow the vegetation to mature; or, in other words, its sensitivity.

Analyze the effect of salvage harvest following wildfire.

Is there a salvage plan in case of fire? What will it be based upon? These questions are unprobed. The criteria to be used to evaluate salvage activities; the likely effects of salvage on different soil types, slopes, etc; the methods to be employed when fighting fires to allow for some natural processes to function; all these essential analyses are missing. The salvage activities on Rainbow Ridge following the 1992 fire are still poorly revegetated (as noted by CDF forester Rohl). The road and landing network created, or "improved," to facilitate the harvest has resulted in excessive sediment production. Will these past effects influence salvage logging plans in sensitive watersheds such as the Mattole?

Salvage activities must be timely or the value is lost. This puts an increased burden on extensive pre-planning.

Analyze the effect of planned harvests on species with specialized habitat needs.

The SYP discussion (Appendix F) regarding biodiversity appears to reason that managing for guilds of species is preferable to managing for single species; that by the Company's own choosing, managing for guilds with a large number of species will result in the maximum biodiversity; that neotropical migratory birds make up such a guild, exhibit habitat specialism and prefer young-seral forests; that, therefore, managing for biodiversity requires managing for neotropical migratory birds requires maximizing young-seral forest habitat. This line of reasoning does not take into account that diversity can also refer to rare (and endangered or threatened) species whose habitat needs are highly specialized and their preferred habitat may not be suitable for many other species.

In other words, one must define diversity to mean the whole range of species rather than the greatest number possible on one site. The HCP should include an approach to biodiversity which intends to preserve all species found or likely to be found in the natural community. The fact that some are not present may be an indication of the lack of watershed health or they may be an indication of inadequate survey work. In either case, it would be prudent to follow Aldo Leopold's advice, "An intelligent tinkerer preserves all the parts."

Analyze more completely proposed management in riparian zones. Analyze the relationship between the health of Class II and Class I watercourses and explain how lower protection measures in Class II courses will impact Class I stability. Analyze how WLPZ determinations of measuring zone width by slope distance (as opposed to horizontal distance) was made.

What is the rational for sparing only one tree per 100 feet of stream? What is the relation of slope and aspect, and timber type in the prescription to remove timber from the zone? What is the effect on the blanket prescription of catastrophic events? What is the target levels of stream and soil temperatures, of abundance of macroinvertebrates, of depth of pools (and any of the other essential features described by PACFISH)?

The HCP must identify targets of acceptable stream temperatures, concentrations of macro-invertebrates, essential canopy cover, etc., prescribe how data will be collected on the present conditions and how it is going to monitor to determine if targets are met.

The SYP assumes that it encompasses all the information it needs and, according to Henry Alden, "there will be a gradual increase of water quality...Some streams will go up, others will go down." This is not proper or legal management of public resources. No stream may purposefully be degraded in an attempt to raise the average of an ownership.

Develop a comprehensive stream monitoring program

Include in this program (1) clear objectives for assessing levels of use, presence and absence of essential features of healthy watercourses, (2) placement of monitoring stations strategically in major tributaries where management activities are contemplated and located where they will monitor typical conditions in the reach. This is important for isolating the effects of management and aid in the locating of sources of problems and their eventual remediation. Also, stations must assess if sub-basins are maintaining functioning riparian and stream corridors.

Analyze how management in the riparian zones will contribute to improving water quality. Analyze the likelihood of increased blow-down in riparian zones if there is no external low-cut buffer to clearcuts.

This information is only generally discussed in the SYP.

SYP and HCP biological and geomorphic determinations will benefit from peer review prior to adoption by government agencies.

To improve public confidence that public resources are not being put at risk in this plan, an independent panel of recognized scientific authorities must review all assumptions, analyses, and determinations.

Incorporate more public participation in developing the HCP

Concerned citizens need to be included in the process beyond what has been established. The recent deaths from a clearcut in Oregon, the homes destroyed below Company lands in Stafford, and the homes inundated by Cummins Creek all indicate that the public has much at stake in the development of a plan which will remain in effect for more than a century. Mattole residents Freeman House, David Simpson, and myself had an opportunity (February 12) to question Henry Alden on the workings of his Model. He said we could play three potential roles in the process: (1) conduit for community concerns, (2) source of instream information, and (3) potential litigant. As this was an information gathering meeting, we did not discuss commenting on the plan, nor bring to him our concerns. That should be done in an open process with agency representatives in attendance.

Thank you for your consideration of the above. As noted, we are concerned about the potential risks to watershed values from the execution of an inadequate SYP/HCP. We trust that you will discharge your duties guided by the best available information and as prescribed by law.

Sincerely yours,

Michael Evenson

Michael Evenson